### ETHERNET CABLE CONFIGURATION

**INFORMATION SHEET 2.1-3** 



# **LEARNING OBJECTIVES**

After reading this **INFORMATION SHEET**, STUDENT(S) MUST be able to:

- Configure ethernet cable
  - Straight Through (T568B) configuration
  - Straight Through (T568A) configuration

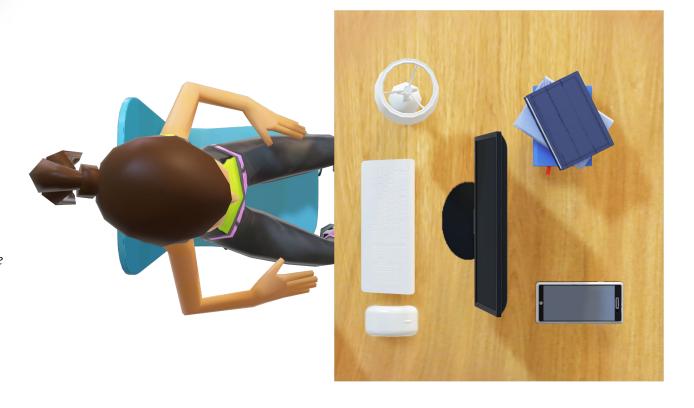




# INTRODUCTION

A good ethernet cable configuration termination provides a proper wire crimp. Also, important, is not unwinding the wires more than necessary.

(Read Information sheet 2.1-1 for more information about Ethernet cable configuration)





#### **CROSSOVER CONFIGURATION**

It is a type of configuration that enables users to connect similar devices such as, desktop to another desktop.





### STRAIGHT THROUGH CONFIGURATION

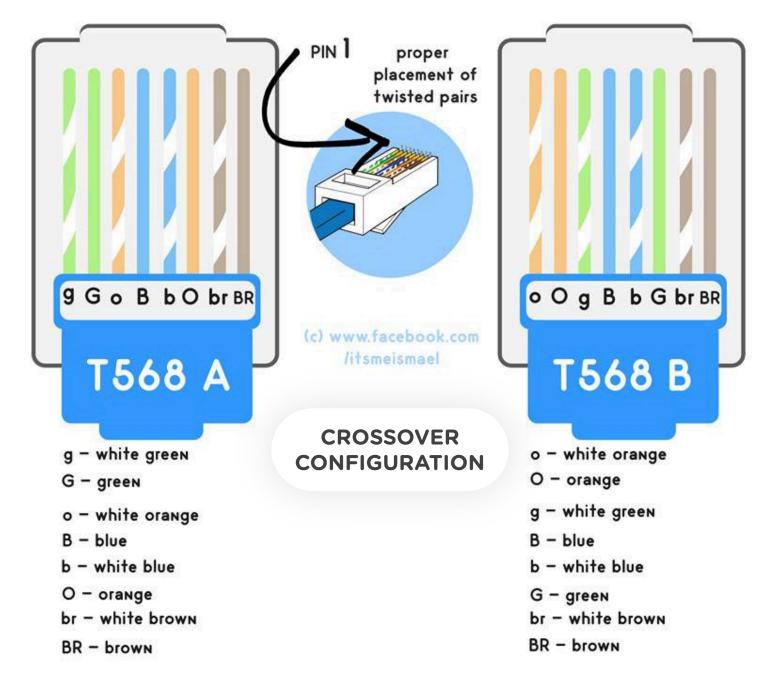


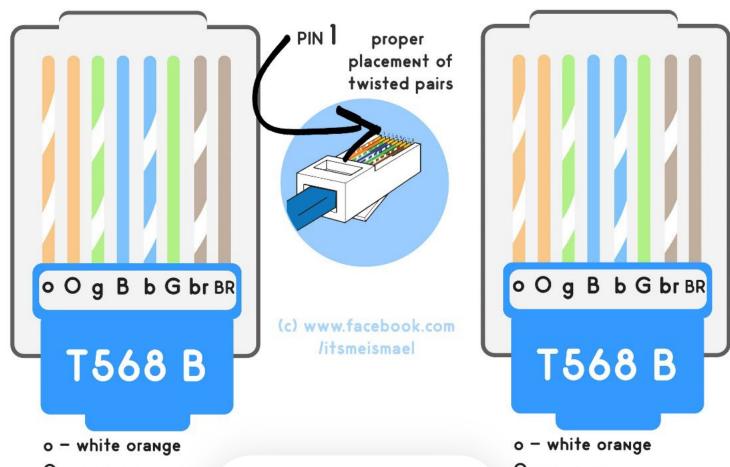
It is a type of configuration that enables users to connect two dissimilar devices such as, desktop to switch.











O - orange

g - white green

B - blue

b - white blue

G - green

br - white brown

BR - brown

# STRAIGHT THROUGH CONFIGURATION

O - orange

g - white green

B - blue

b - white blue

G - green

br - white brown

BR - brown

# HOW TO CONFIGURE

#### **Tools and Materials**

- Crimping tool
- Wire stripper
- **RJ45**
- Network cable tester



## HOW TO CONFIGURE

#### **PROCEDURES**

- 1. Strip the cables jacket back one full inch.
- 2. Untwist the wires back to within 1/8" of the jacket.
- 3. Arrange the wires in the order in which you want to crimp them, (T568A, T568B, etc.).
- 4. Grasp the wires firmly, between your thumb and forefinger, flatten them, and even wiggle them a bit, to take out the curliness, (concentrate your efforts on the bottom 1/2") the wires must lay flat and together, aligned as close as possible.



# **HOW TO CONFIGURE**

- 5. While holding the wires firmly, cut off the wires 1/2" from the cables jacket (Cut the wires with some sharp wire strippers or even high-quality scissors, avoid wire cutters that flatten the ends of the wires insulating material, this makes inserting the wires very difficult.)
- 6. Insert the wires into the connector, making sure the wires stay lined up. \*
  The wires should reach the end of the little tube they are in.
- 7. The jacket should go even with the end of the first indent; if possible, it's a strain relief for the cable.
- 8. Insert it into the crimping tool, and Crimp it!
- 9. Use network cable tester to test your ethernet cable.



### **IMPORTAN NOTES**

- A straight through cable has an identical end.
- A crossover cable has different ends.
- A straight-through is used as a patch cord in Ethernet connections.
- A crossover is used to connect two Ethernet devices without a hub or for connecting two hubs/switches.
- A crossover has one end with the Orange set of wires switched with the Green set.
- Looking at the RJ-45 with the clip facing away from you, Brown is always on the right, and pin 1 is on the left.
- No more than 1/2" of the Ethernet cable should be untwisted otherwise it will be susceptible to crosstalk.
- Do not deform, do not bend, do not stretch, do not staple, do not run parallel with power cables, and do not run Ethernet cables near noise inducing components.



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